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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,414	12/21/2005	Nigel-Philip Cox	2002P17911WOUS	3588
28524 7590 07/27/2009 SIEMENS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830				
EXAMINER VELASQUEZ, VANESSA T				
ART UNIT 1793		PAPER NUMBER		
MAIL DATE 07/27/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,414

Applicant(s)

COX ET AL.

Examiner

Vanessa Velasquez

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26, 28, 29, 33 and 36-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26, 28, 29, 33 and 36-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

Claims 1-25, 27, 30-32, 34, and 35 remain canceled. Claims 33, 44, and 45 are amended. Currently, claims 26, 28, 29, 33, and 36-50 are pending and presented for examination on the merits.

Status of Previous Rejections Under 35 USC § 112

The previous rejection of independent claim 26 and all claims dependent therefrom under the first paragraph of 35 U.S.C. 112 is maintained. Applicant responded by stating that the casting limitations at issue are disclosed in paragraphs [0018] and [0019] of the specification. The Examiner has reviewed the aforementioned paragraphs and has determined that they do not adequately provide support because they merely recite the act of casting, but not the specific details of casting as claimed. Applicant further reasoned that since the disputed limitations are known to one of ordinary skill in the art to be associated with casting, the limitations are not new matter in view of the fact that they would be common knowledge to the skilled artisan. In response, if the limitations are known to one of ordinary skill in the art to be associated with casting as alleged by Applicant, then there would be no need to explicitly recite such common knowledge in the claim, as doing so would not only be redundant but would not serve to patentably distinguish the claim from any prior art that teaches casting.

The previous rejection of claims 33, 44, and 45 under the second paragraph of 35 U.S.C. 112 is withdrawn in view of the amendments to the claims.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 26, 33, 36-38, 44-46, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Genereux et al. (US 4,769,087) in view of *Glossary of Metallurgical and Metalworking Terms* (Metals Handbook, ASM Handbooks Online; hereafter, "Metals Handbook"). The claims stand rejected for the reasons set forth in the Office action dated March 16, 2009.

Claims 28, 29, 39, 43, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Genereux et al. (US 4,769,087) in view of *Glossary of Metallurgical and Metalworking Terms* (Metals Handbook, ASM Handbooks Online; hereafter, "Metals Handbook"), as applied to claim 26 above, and further in view of Vogt et al. (US 6,120,624). The claims stand rejected for the reasons set forth in the Office action dated March 16, 2009.

Claims 40, 41, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Genereux et al. (US 4,769,087) in view of *Glossary of Metallurgical and Metalworking Terms* (Metals Handbook, ASM Handbooks Online; hereafter, "Metals Handbook"), as applied to claim 26 above, and further in view of Heitman et al. (US

5,071,059). The claims stand rejected for the reasons set forth in the Office action dated March 16, 2009.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Genereux et al. (US 4,769,087) in view of *Glossary of Metallurgical and Metalworking Terms* (Metals Handbook, ASM Handbooks Online, as applied to claim 26 above, and further in view of Vogt et al. (US 6,120,624) and Watter (US 2,304,976). The claim stands rejected for the reasons set forth in the Office action dated March 16, 2009.

Response to Arguments

2. Applicant's arguments filed April 15, 2009 have been fully considered but they are not persuasive.

First, Applicant argues that Genereux's disclosure of a pre-cast ingot does not teach the claimed limitation of casting a "component from a melt of the alloy". In response, the ingot is interpreted as the "component" (component is interpreted as being a part), and as was previously indicated on page 6 of the Office action using *Metals Handbook*, casting means forming an object into some shape from molten metal. Thus, the cast ingot of Genereux still properly reads on the claim limitation.

Second, Applicant argues that Genereux's disclosure of applying hot isostatic pressing (HIP) on the cast ingot does not teach the claim limitation of "redensifying the component in a furnace immediately after the casting step". In response, HIP is a type of densification operation. This is further evidenced by instant claim 36, wherein the redensification step comprises HIP. HIP would also inherently be performed in a

furnace or physically enclosed space because of the elevated temperatures and pressures at which the operation is executed. With regard to the immediacy of the HIP step to the casting step, it was stated in the previous Office action (page 5) that Genereux does not specify the duration between the casting and HIP. However, it would be obvious to one of ordinary skill in the art to carry out HIP immediately after casting because doing so would decrease manufacturing time and increase the efficiency of the process. Furthermore, it should be emphasized that "immediately" is a term of relative degree; therefore, carrying out HIP after casting will be interpreted as being "immediate".

Third, Applicant argues that it would not be routine experimentation for one of ordinary skill in the art to arrive at the claimed cooling rate because the cooling rate of Genereux is less than 1/10 the cooling rate of the claimed invention. In response, it has been established that

[a] reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments.

See MPEP § 2123 (I-II), underlining added. In the present case, while Genereux's cooling rate lies outside the claimed range, Genereux discloses the effects of cooling at rates beyond the invention of the prior art. Therefore, it is known to one of ordinary skill in the art the consequences of cooling at non-preferred rates. It would furthermore be obvious to one of ordinary skill in the art to optimize the cooling rate for a desired precipitate particle size, as the cooling rate directly affects particle size. Applicant further asserts that since the goal of overaging is to produce larger gamma prime

precipitates, one of ordinary skill in the art, according to Genereux, would want to lower the cooling rate as much as possible to obtain larger gamma prime grains. In response, "larger" is a relative term. In Genereux, at least a part of the gamma prime phase goes into solution, and the gamma prime precipitates grow upon cooling during overaging (col. 4, lines 46-63). In other words, there is no precipitate (i.e., the size of the precipitate is zero) because all of the gamma prime phase is dissolved and then the precipitate acquires a physical dimension (i.e., the size is non-zero) during cooling. Thus, the gamma prime precipitates grow "larger". It should be noted that the precipitates still grow (become larger or coarsen) whether the cooling rate is the preferred embodiment of Genereux or outside the preferred embodiment; what differs is the final size of the precipitates, which is not claimed. Therefore, Genereux does not teach away from the claimed invention because it discloses the growth of precipitates at cooling rates both in the preferred and nonpreferred embodiments.

Conclusion

No claims are allowable.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanessa Velasquez whose telephone number is 571-270-3587. The examiner can normally be reached on Monday-Friday 9:00 AM-6:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached at 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art
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/Vanessa Velasquez/
Examiner, Art Unit 1793